DEPARTMENT OF THE NAVY
NAVAL SUPPORT ACTIVITY WASHINGTON
1411 PARSONS AVENUE ST STE. 303
WASHINGTON NAVY YARD DC 20374-5003

5090
Ser N4/348
July 8, 2016

Ms. Karen Crumlish
Chief, Drinking Water Branch (3WP21)
EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Dear Karen Crumlish:

SUBJECT: TOTAL COLIFORM REPORT, U.S. NAVAL OBSERVATORY

Enclosed is the Total Coliform Report for the monitoring period June 2016 for the U.S. Navy Observatory.

If you have any questions or require further information, please contact Mr. Dane Bowker, Public Works Department Drinking Water Program Manager at 202-433-4191 or email: dane.bowker@navy.mil.

Sincerely,

DURANT S. GRAVES
Installation Environmental Program Director
By direction of the Commanding Officer

Enclosures: 1. Total Coliform Report
2. Certificate of Analysis
3. Disinfectant Residual Reporting

Disinfectant Residual Reporting

Systems must report the following (40 CFR 141.134(c)):

(i) The number of samples taken during each month of the last quarter.
(ii) The monthly arithmetic average of all samples taken in each month for the last 12 months.
(iii) The arithmetic average of the monthly averages for the last 12 months.
(iv) Whether, based on Sec. 141.133(c)(1), the MRDL was violated.

Step 1:

a. Enter data from the current month of monitoring, including begin and end dates for sample collection.

b. The disinfectant residual data entered is that monitored at the same time and place as coliform samples are collected. The number of samples collected should equal the number of coliform samples collected during the month (including repeat coliform samples).

c. If you did not monitor for free chlorine during the month, leave those cells blank.

Monthly sample collection **begin** date:	6/8/2016
Monthly sample collection **end** date:	6/8/2016

Parameter	# of Samples	Monthly Average	Min	Max
Free Cl2				
Total CL2 - Chloramine disinfection				
Total CL2 - Chlorine disinfection	1	3.30	3.30	3.30

Step 2:

a. Drop the oldest month of data and add the most recent month.

b. Enter the current month's data (average, minimum, maximum) into the RAA calculation, below.

c. If you did not monitor for free chlorine during the month, leave those cells blank.

d. This spreadsheet will automatically calculate the running annual average based on the monthly averages.

e. At the end of the quarter (March, June, September, December), the running annual average of monthly averages (RAA) is used to determine compliance with the MRDL.

f. The RAA averages at the end of the quarter are necessary for CWSs to prepare CCRs.

		Total Chlorine			Free Chlorine		
		Monthly average	Min	Max	Monthly average	Min	Max
July	2015	1.11	1.11	1.11			
August	2015	2.60	2.60	2.60			
September	2015	2.40	2.40	2.40			
October	2015	0.48	0.48	0.48			
November	2015	0.91	0.91	0.91			
December	2015	1.05	1.05	1.05			
January	2016	0.84	0.84	0.84			
February	2016	1.70	1.70	1.70			
March	2016	2.50	2.50	2.50	0.11	0.11	0.11
April	2016	1.42	1.42	1.42	1.19	1.19	1.19
May	2016	3.30	3.30	3.30			
June	2016	3.30	3.30	3.30			
Running Avg		**1.8**			**0.7**		

RAA Summary

		Total Chlorine	Free Chlorine
SEPTEMBER	**2015**	2.2	
DECEMBER	**2015**	1.9	
March	**2016**	2.5	0.11
JUNE	**2016**	1.8	

The highest value of RAA for Total Chlorine is necessary for CWSs to prepare CCRs.

Total Coliform Report Summary: June 2016
Location: NSF Naval Observatory
PWS ID: DC0000005
Number of Routine Samples Required: 1
Number of Routine Samples Taken: 1
Number of Routine Samples Coliform +: 0
Number of Routine Samples Fecal Coliform+: 0
Percentage of Samples Disinfectant Not Detected: **0

Number of Repeat Samples Required: 0
Number of Repeat Samples Taken: 0
Number of Repeat Samples Coliform+: 0
Number of Repeat Samples Fecal Coliform+: 0

Building Number	Proposed Sampling Days	Sampling Location	Total Coliform pos/neg	pH	Residual Chlorine mg/L	Temp (C)	HPC (cfu/mL)	Chlorine & HPC* "V" (Y/N)
NSF-OBSY 59	First Half of Each Month	Preparation Kitchen in Sink	Negative	8.08	3.3 T	22.6	N/A	N/A

*Record Yes when (1) Chlorine < 0.10 mg/L and HPC is either not measured or HPC >500 cfu/mL or (2) Chlorine is not measured and HPC >500 cfu/mL.
** Equal to the number of Yes in column titled "Chlorine & HPC*" divided by the sum of the Number of Routine and Repeat Samples Taken and the number of instances when HPC is monitored but residual chlorine is not monitored.

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Microbac Laboratories, Inc.

Baltimore Division

2101 Van Deman Street • Baltimore, MD 21224

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Fax: 410-633-6553
www.microbac.com

COVER LETTER

Kosala De Silva
Inspection Experts, Inc
9220 Rumsey Rd., Bay # 5
Columbia, MD 21045

RE: USNO

June 09, 2016
Report No.: 16F0658

The report of analyses contains test results for samples received at Microbac Laboratories, Inc., Baltimore Division on 06/08/2016 13:08.

The enclosed results were obtained from and applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report has been reviewed and meet the applicable project and certification specific requirements, unless otherwise noted.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories, Inc.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

This Data Package contains the following:

- This Cover Page
- Sample Summary
- Test Results
- Certifications/Notes and Definitions
- Cooler Receipt Log
- Chain of Custody

Kimberley Mack

Final report reviewed by:	Kimberley M. Mack/Project Manager	6/9/2016 Report issue date

All samples received in proper condition and results conform to ISO 17025 and TNI NELAC standards unless otherwise noted.

If we have not met or exceeded your expectations, please contact Kimberley M. Mack/Project Manager at 410-633-1800. You may also contact Trevor Boyce, President at trevor.boyce@microbac.com

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CERTIFICATE OF ANALYSIS

Inspection Experts, Inc	Project: USNO	Report: 16F0658
9220 Rumsey Rd., Bay # 5	Project Number: 15-0011-214	Reported: 06/09/2016 11:00
Columbia, MD 21045	Project Manager: Kosala De Silva	

SAMPLE SUMMARY

Sample ID	Laboratory ID	Matrix	Type	Date Sampled	Date Received
NSF-OBSY 59	16F0658-01	Drinking Water	Grab	06/08/2016 11:33	06/08/2016 13:08

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NSF-OBSY 59

16F0658-01 (Drinking Water) Sampled: 06/08/2016 11:33; Type: Grab

Analyte	Result	Reporting Limit	Units	Limits	Prepared	Analyzed	Analyst	Method	Notes

Field Analysis

Analyst:	NA	**pH:**	8.08	**Flow (g/min):**	NA	**Res. Cl (mg/L):**	3.3	**GW Elev.(ft):**	NA
Temp. (C):	22.6	**Turb. (ntu):**	NA	**D.O. (mg/L):**	NA	**Cond. (umhos/cm):**	NA	**LEL (%):**	NA
ORP (mV):	NA	**Volume (L):**	NA	**Flow (g/day):**	NA	**Salinity (ppt):**	NA	**Ambient Temp. (°C):**	NA

Microbac Laboratories, Inc. - Baltimore

Microbiology

Coliform, Total	**Negative**	per 100ml	1.0	060816 1420	060916 1025	QLW	SM 9223B Colilert	

Microbac Laboratories, Inc. - Baltimore

Kimberley Mack

Kimberley M. Mack, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Original Report

MICROBAC®

Microbac Laboratories, Inc.
Baltimore Division
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CERTIFICATE OF ANALYSIS

Inspection Experts, Inc	Project: USNO	Report: 16F0658
9220 Rumsey Rd., Bay # 5	Project Number: 15-0011-214	Reported: 06/09/2016 11:00
Columbia, MD 21045	Project Manager: Kosala De Silva	

Project Requested Certification(s):

A2LA (Environmental)
State of Maryland (Drinking Water)

Analyte Certification Exception Summary

No certification exceptions

All analysis performed were analyzed under the required certification unless otherwise noted in the above summary.

Certification List

Below is a list of certifications maintained by Microbac Laboratories, Inc. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. A complete list of individual analytes pursuant to each certification below is available upon request.

Code	Description	Certification Number	Expires
Microbac Laboratories, Inc. - Baltimore			
A2LA1	A2LA (Biology)	410.02	04/30/2017
A2LA2	A2LA (Environmental)	410.01	04/30/2017
VA-B	Commonwealth of Virginia (NELAC) - Baltimore	460285	03/14/2017
CPSC	CPSC Testing of Childrens Products and Jewelry	1115	04/30/2017
Pb	Environmental Lead (ELLAP)	410.01	04/30/2017
MD	State of Maryland (Drinking Water)	109	06/30/2016
WV	West Virginia	054	09/30/2016
Microbac Laboratories, Inc. - Richmond			
VA-R	Commonwealth of Virginia (NELAC) - Richmond	460022	06/14/2016

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Columbia, MD 21045	Project Manager: Kosala De Silva	

Qualifiers/Notes and Definitions

General Definitions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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Cooler Receipt Log

Cooler ID: Default Cooler **Cooler Temp:** 1.10°C **Work Order:** 16F0658

Custody Seals Intact:	Yes	COC/Containers Agree:	Yes
Containers Intact:	Yes	Correct Preservation:	Yes
Received On Ice:	Yes	Correct Number of Containers Received:	Yes
Radiation Scan Acceptable:	Yes	Sufficient Sample Volume for Testing:	Yes
COC Present:	Yes	Samples Received in Proper Condition:	Yes

Comments:

Instructions for completing the Chain of Custody Record on back.

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Chain of Custody Record

Page 1 of 1

Customer
Name: Inspection Experts Inc.
Address: 9220 Rumsey Road, Bay #5
Columbia, MD 21045

Project Information
Name: USNO
Number: 15-0011-214
PO:

Turn Around Time
(●) Standard ( ) RUSH*
Needed By:

Compliance
( ) Yes ( ) No
Agency:

Contact
Name: Kosala De Silva
Number: 410-715-3939
Email: kosala@ieinc.net

Sampler
Name: Gayan Kularathne
Phone: 240-252-0841
Cert ID:*** 0697GK

Report Options
[ ] EDD
[x] Email kosala@ieinc.net
[ ] Fax

QC Pacakge
(●) Level I
( ) Level II**
( ) Level III**
( ) Level IV**

16F0658

Client Sample ID	Matrix****	Grab	Composite	Filtered	Date Collected	Time Collected	No. of Containers	Requested Analysis: TC P/A SM9223B			pH	Temp	Total Cl	Comments
NSF-OBSY 59	DW	X			06/08/16	1133	1	X			8.08	22.6	3.3	

sms 6/8/16 2120

Possible Hazard Identification [ ] Hazardous [ ] Non-Hazardous [ ] Radioactive **Sample Disposition** [X] Dispose as appropriate [ ] Return [ ] Archive

Number of Containers: 1 Cooler Number: Temp upon receipt(°C): 1.1 Sample Received on Ice or Refrigerated from Client: Yes / No Radiation Scan Acceptable Yes / No	**Sampled By (signature)**	**Printed Name/Affiliation** Gayan Kularathne	**Date/Time** 06/08/16 1308	**Received By (signature)** Kimberley Mack	**Printed Name/Affiliation** MLI
	Relinquished By (signature)	**Printed Name/Affiliation**	**Date/Time**	**Received By (signature)**	**Printed Name/Affiliation**
	Relinquished By (signature)	**Printed Name/Affiliation**	**Date/Time**	**Received for Lab By (signature)**	**Printed Name/Affiliation**

* Please notify lab prior to drop off. WHITE - ORIGINAL LAB YELLOW - RECEIPT Page 1 of 1 rev.121112

** Surcharge May Apply to add'l QC Packages *** Sampler certification ID needed for some agencies.

**** Matrix Types: Air(A), Childrens Product(CP), Food(F), Paint(P), Soil/Solid (S), Oil(O), Wipe(WI), Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

Instructions for completing the Chain of Custody Record

Cooler Receipt Form / Sample Acceptance & Noncompliance Form

Microbac Laboratories, Inc., Baltimore Division
Control # 606-02
Effective Date. 04/25/16
Page 1 of 1

Number of Coolers Received: 1
Client: IEI
Form Completed By: K. Mack

Receipt Date / Time: 6/8/16 1308
Work Order # 16F0657/658

Shipper: ☐ Microbac ☒ Client ☐ UPS ☐ FedEx
Custody Tape Intact: (YES) / NO / NA
Containers Intact: (YES) / NO
Sample Received on Ice or refrigerated: (YES) / NO
Infrared (IR) Temperature: 1.1 °C

Radiation Scan: ☒ Negative or _____ mR/hr
Chain of Custody Present with shipment: (YES) / NO
Sample Bottle IDs agree with COC: (YES) / NO
Preservation requirements met: YES / NO / (Not Checked)
Correct Number of Containers / Sample Volume: (YES) / NO (If No, contact client immediately)
Headspace in container: YES / NO / (NA)
Type of Sample: (Water) Soil Wipes Oil Filter Solid Sludge Food Swab Other _____

Container Type / Quantity:

A - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ If preserved pH <2___, pH >10___
B - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ If preserved pH <2___, pH >10___
C - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ If preserved pH <2___, pH >10___
D - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ If preserved pH <2___, pH >10___
E - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ If preserved pH <2___, pH >10___
H - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ If preserved pH <2___, pH >10___
K - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ If preserved pH <2___, pH >10___
L - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ If preserved pH <2___, pH >10___
M- ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ If preserved pH <2___, pH >10___
P - ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ If preserved pH <2___, pH >10___
W- ___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ If preserved pH <2___, pH >10___
V - ___ Unpreserved ___ HCl ___ HCl / Ascorbic Acid ___ HCl / NaTHIO **(Checked at time of Analysis)**
F - ___ Unpreserved ___ NaTHIO **(Checked at time of Analysis)**
S - ___ Unpreserved 8 NaTHIO **(Checked at time of Analysis)**
SN- ___ Unpreserved ___ NaTHIO ___ NaTHIO/EDTA **(Checked at time of Analysis)**

___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ If preserved pH <2___, pH >10___
___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ If preserved pH <2___, pH >10___
___ Unpreserved ___ H2SO4 ___ HNO3 ___ HCl ___ NaOH ___ NaOH/Ascorbic Acid ___ If preserved pH <2___, pH >10___

Describe preservation requirements not met:

All Acid preserved <2 pH NaOH preserved >12 pH All others >2 and <10 (usually 4-8)

Sample ID:_____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID:_____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID:_____ H_2SO_4 HNO_3 NaOH _____ mls added
Sample ID:_____ H_2SO_4 HNO_3 NaOH _____ mls added

H_2SO_4 – Sulfuric Acid, HNO_3 – Nitric Acid, NaOH – Sodium Hydroxide, ASC – Ascorbic Acid, NaTHIO – Sodium Thiosulfate

Describe Anomalies:_____

Contact information / Summary of Actions:

Date / Time:_____ Contact:_____ Contact By:_____
Comments:_____